G. R. S. IX-5]

Previous references.

1917. ✓

(San.)

File No. 84-16

Serial Nos. ~~2,4,5~~ 5,6 & 7

Later references.

P

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. ~~2,4,5~~ 5,6 & 7

Part B for June 17.

SUBJECT.

Copies of the Proceedings of the Govt of Madras re the Prevention of the spread of Plague from Mysore into adjoining Territory.

Recorded

9/8. 15.8.17

2138/17

W D 88—GPB—50,000—24-7-16

G. R. S. 11] 1916-17

GENERAL AND REVENUE SECRETARIAT.

(Sanitary)

NOTES.

File No. 84-16

FILE HEADING.

Prevention of the spread of plague from Mysore into the adjoining British territory.

From

No.	Dated		Received
Diary No.	Enclos.	Spare Copies.	Serial No.

BRIEF ABSTRACT OF LETTER.

NOTES AND ORDERS

NOTES—First Sheet.

G.R.S. III—3]

Routine Notes.

[To be used only for notes, requisitions, etc., not intended for permanent record.]

4470
5.2.17

This matter requires investigation. Is it only from Mysore that plague enters the British Territory. Does not the source also happen?

The statistics may kindly be examined.

18.2.17

Leading file Dept.

1 Supt. IV to be personally resp.
2. Set forth correct information in a fortnight, if it is not available here

Step always

Dues
1912

19/2-17

1 Copy of Residency letter forwarding copies of the Proceedings of the Govt of Madras re the Prevention of the Spread of Plague from Cuddapah into the adjoining British territory, is submitted to Dewan.

Bhavaisamalpur

Registrar

Submd.

Our local reports do not furnish any information. A draft calling for particulars is submd for approval or other orders.

21/2/17

True

21/2-17

Reply has not yet been received. Draft reminder is submitted

2-3-17

2/3

Issue

2/3

N.B.—Should routine notes be written on small slips, the notes must be copied, or slips pasted on this form.

W.D. 84—GPB—60,000—20-7-16.

General and Revenue Secretariat. | Gen. File No. | of 1916-17

Serial No.

5

To the Sanitary Commissioner, No. 5487 dated 21.2.17

Forwards for perusal, Madras Govt. order No. 543/S, dated the 23rd Dec. 16, enjoining certain plague preventive measures in villages bordering on the Mysore State and enquires whether it is only from Mysore that plague enters the British Territory & whether the reverse does not also happen.

9 From the Sanitary Commr. No. C389-4 dated 5-4-17 (March 17).

Submits two statements, one showing the number of plague deaths in the Mysore State compared with the Madras presidency and the other the number of plague cases & deaths in the frontier talukas and states that the disease in the frontier talukas excepting Dharmapuri shows a decided tendency towards decline as years go by.

10 From the statement it is observed that in the Dharmapuri taluk there were only 8 attacks and 4 deaths during 1913-14. In the subsequent year the figures rose to 789 attacks and 490 deaths. The Sanitary Commr. remarks that Mysore State is exposed to a continuous stream of infection from the British territory.

Submitted

7

NOTE—Contn. sheet.

16-3-17

General and Revenue Secretariat. | File No. of 1916-17

Serial No.

A

The decision of the Madras govt is based upon the opinion of its Sanitary Commr vide letter from the Sanitary Commr: to Collector of Ttore.

Submit orders

KG 12/3-17

(H. Lee.) —

A draft refuting the observation of the Madras authorities may be proposed, The materials furnished by the S.C. should be sifted.

Dwarka 14/3.

KG 14/3-17

B A draft is put up for consideration. vide Secretary's note of 18/2/17.

Second member (H Sharpe) 4.3

Dwarka 19/3

KG 19/3-17

Dwarka 21/3

KG 21/3-17

Mr S of C.S.

Draft submitted.

K.G. 19.3.17.

135. 20.3.17.

5360 21.3.17

Reg

Credit is chiefly due to Mr S. Please note in his character Roll

Noted in C.R. Mr 4/6/15

Dwarka 4/4

Mr S. will kindly get recorded at once Dwarka 28/3

Returned to H.G. 31/4/17

15 I have to thank the Sanitary for the very carefully prepared draft.

16 Will the Sanitary also kindly furnish the total number of deaths in each of the three districts for the period of 4 years mentioned in the Statement, (b) the population of each district & (c) the percentage of the former to the latter.

27.3.17 AO

NOTE—Contn. sheet.

General and Revenue Secretariat. | Secret File No. of 1916-17

Serial No.

The required information has been inserted in the Statement.

Dewan)

Dewan
4/4
5/4-17

5573
5-4-17

18 This may be circulated to the Members of Council & may then after approval by His Highness.

2-5-17

C.S done
4/5

D.S.N is Submitted herewith

15/6

Genl Secy)
Dewan)

Dewan
16/6

7100
16-6-17

NOTE—Contn. sheet.

(For disposal by circulation) 9.5.1917

GENERAL AND REVENUE SECRETARIAT.

Council Matter.

SUBJECT.

Draft letter to the Residency about certain observations made in the Proceedings dated the 23rd December 1916 of the Government of Madras in regard to the spread of plague from Mysore into the adjoining Districts of the Madras Presidency.

CIRCULATED TO THE MEMBERS OF COUNCIL.

By Order,

D. M. Ramaswamy 9/5

8th May 1917. *Secretary to Government.*

Extraordinary Member of Council. Appd. Dewan 10/5/16

First Member of Council. Appd 11/5 10/5/16 M 3/9/11

30-5-20 9.5.

Second Member of Council. Approved.

WD 2012—GPB—1 000—9-2-16

Submitted to His Highness.

I submit herewith a draft letter to the Residency pointing out that the statement made by the Sub Collector of Hosur in his communication to the Collector of Salem referred to in the preamble of the Proceedings of the Madras Government dated 23rd December 1916, to the effect, that no steps are taken to control the spread of plague in the State, and that there is more plague than appears in the weekly reports cannot be supported by facts.

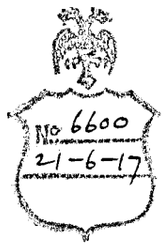
2. The draft has been passed by the Members of -- Council and may be graciously approved.

M. Rāmayya

21st June 1917.

BR

Record of Cases submitted for the Orders of His Highness the Maharaja.



Subject.

Draft letter to the Residency regarding the spread of plague from the Mysore State into the adjoining Madras Districts.

13/5

Order.

~~KRW~~

23/6/17

Yes.7

58/3-7-17

76/9-7-17

64/4/7

4/7

24.6.17 RO

25/6

25/6

Issue

WD 1233—GPB—60,000—1-12-16—S.

G. R. S. III-2]

General and Revenue Secretariat.

San File No. 84 of 1916-17.

Serial No.	
87	20 Memo 18th asst to the Hon'ble the Resident in Mysore Pol No. 1294 dy 27.6.17 states with ref to sl: 2 that certain inferences and observations made in the G.O order are based on insufficient data and discloses the Sustenance of misapprehension on the subject.

NOTE—Contn. sheet.

No.111 En.2.

From

Major T.H. St. George Tucker,

First Assistant to the Resident in Mysore.

T o

The Secretary to the Government of Mysore,

General Department.

Dated Bangalore the, 2nd February 1917.

Sir,

I am directed to forward 2 copies of the Proceedings of the Government of Madras, No.543 Plague, dated the 23rd December 1916, regarding the prevention of the spread of plague from Mysore into the adjoining British territory.

I have the honour to be,

Sir,

Your most obedient servant,

(SD) T.H. St. George Tucker,

FIRST ASSISTANT RESIDENT.

****

"C O P Y"

Registrar, General and

Revenue Secretariat.

CS.

Government of Madras.

LOCAL AND MUNICIPAL DEPARTMENT.

(PLAGUE)

G.O. No. 543 P., 23rd December 1916

Plague precautionary measures.

Village panchayats and headmen of villages bordering on the Mysore State empowered to prevent persons and consignments of grain arriving from infected areas in that State from entering the villages unless they are disinfected and the Mufassal Plague Regulations amended accordingly.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT

(Plague).

Read the following papers :—

I

Letter—from E. W. Legh, Esq., I.C.S., Collector of Salem.
To—the Secretary to Government, Local and Municipal Department.
Dated—the 10th May 1916.
No.—192 P.

I have the honour to forward herewith copies of two letters of the Sub-Collector, Hosur and one of the Sanitary Commissioner's, Madras.

2. The correspondence began with the endeavour to locate the causes which governed the spread of plague from the Mysore Province into the Hosur taluk with a view thereafter to devising means to preventing or checking the spread of disease in the district.

The facts established so far are briefly as follows :—

(*a*) The epidemic is a regular visitant in Mysore over which we have no control.

(*b*) It is fairly clear that it is from that area that this district is annually infected and that the means of transport are by human clothing or merchandise, very often fowls.

(*c*) The intercourse between the villages on either side of the border is so close and so constant and by so many possible routes that any attempt to inspect traffic on its way across the border is out of the question.

(*d*) We have already a large permanent preventive staff and though the Sub-Collector indicates that this could be increased somewhat with advantage, neither he nor I are of opinion that this would be of any use in *preventing* the importation of plague though it might aid in its more early discovery.

(*e*) The only course open seems to deal with all traffic on its arrival in this district.

3. The idea of opening notification stations in each frontier village would of course be impossible : the experiments made however both in this area and around Salem this year in self-protection lead to the hope that something might be done in this way if the system were made a regular part of our plague programme.

4. The Sub-Collector reports the success of the villagers of Krishnagiri who refused to allow into their village people from infected areas until they had remained in the fields for seven or eight days. The same plan was tried around Salem and with this degree of success that the people realised the value and importance of such regulations.

5. As the Sub-Collector points out however it will be too much to expect them to enforce such self-made rules unless they have the support of law.

6. Our passport system has been given up, our protection of the frontiers has so far failed; hence, I desire to give a trial to this system and see what can be made of it in this area where the people are fully acquainted with plague and plague measures.

7. For this purpose, I propose that a regulation which would make this one alternative method of plague prevention be introduced in the Code, viz., that where the Collector notifies that measures for the protection of a given village or given area

against arrivals from infected areas are necessary, it shall be lawful for the village headman (or any one appointed by or assisting him in the matter) to prevent any person entering the village habitation or any merchandise from being brought into or sold in the village market or village site. Persons suspected of so arriving may be prevented from entering for a period of seven days and merchandise till it has been exposed for 12 full hours of sunshine.

Any one disobeying or resisting such orders would be liable to fine under the regulations.

8. It will need a little experience to see how far the above wording meets the situation; but in view of the fact that our present methods have failed to prevent the spread of plague from village to village and of the general dislike to the passport rules, it is desirable to find some new method of prevention. This throws the responsibility largely on the people themselves and will owe its success or failure to their efforts and thus enable them to do without an elaborate staff unless they actually have plague amongst them.

9. I therefore have the honour to request that the sanction of Government may be obtained for giving this proposal a trial at least for a few years and I should be grateful if orders are passed before the 15th June when the next plague season begins in this area.

ENCLOSURES.

(i)

Letter—from the Sub-Collector, Hosur.
To—the Collector of Salem.
Dated—the 11th December 1915.

With reference to your No. 425/P.C., dated 21st September 1915, requesting me to collect evidence as to the routes by which plague reaches Hosur taluk each year, I have the honour to submit the report of the Plague Supervisor and to report as follows.

I have spent a good deal of time in searching through plague records, but I regret to say I can find no satisfactory or conclusive evidence of the routes through which plague reaches Hosur taluk.

From the statistics of the last fifteen years I find that the plague season begins in this taluk in the months of July, August or September. It commences in one or two villages and from there spreads to neighbouring villages. But I am unable to see the source of infection to the villages first infected.

I find of course a large number of first cases which are undoubtedly imported from Mysore but as often as not there were no subsequent cases: and so no conclusions can be drawn.

* * * * *

Apart from these isolated cases I can adduce no evidence, but there remains the general inference to be drawn from the fact that it is always the villages on or near the frontier that are infected.

There are other parts of the taluk, e.g., round Berikai and Shulagiri which are climatically just as favourable to plague: but they are very seldom attacked because on the north-eastern side of the taluk there is not so much communication with Mysore territory and practically no communication with Bangalore: nor is there so much plague in the Mysore villages bordering on Berikai palayapat. Although the positive evidence does not amount to much, I think it is fair to presume that plague spreads to this taluk from Mysore, because there is a great deal of plague in Mysore (more than appears in the weekly reports) and because practically no steps are taken to control it.

In this taluk we have a supervisor and five inspectors all doing nothing but plague work. In Mysore there is one sanitary inspector for the whole taluk who does plague work among his other duties. There is a book of plague regulations corresponding roughly to the old Madras Regulations, which authorises evacuation and the issue of passports, etc., but in practice the regulations are a dead letter in the rural areas. In fact the Amildar (Tahsildar) of Anekal did not even know that he had such a book in his office. Evacuation is not enforced and passports are not issued and as often as not the occurrence of plague is never reported to the authorities.

The villagers of the frontier villages often own lands and generally have relations across the border and there is consequently much social and commercial intercourse and so nothing is more likely—when so little is done to check the plague on the other side of the frontier—than for it to be carried across to our villages.

It will have been noticed that there has been a great deal more plague this year than in last year or in 1912 and 1913, and I believe that this is due to the abolition of the passport system.

The system was no doubt a great inconvenience to the people and in some cases a source of extortion, but there is no doubt that it did give the plague staff some data to work upon. Matagondapalli for instance would very likely have never become infected if it had been known at once that the man who eventually succumbed had come from an infected area. Moreover the trouble of taking out a passport and undergoing observation often deterred people from Mysore and from infected villages in this taluk from moving from their villages and in this way less infection was carried about.

This is not a mere surmise of my own but it has been suggested to me by several private individuals of this taluk and I may add that, though when the passport system was abolished there were general rejoicings, I have heard several regrets lately that the system was not retained.

I do not consider that the daily observation was an important part of the passport system. It was the necessity to take out a passport and the consequent immediate intimation of an arrival from an infected area that was so valuable.

Therefore I respectfully suggest for your consideration the possibility of a revival of a modified form of the passport system, such as the compulsory notification of arrival from an infected area by road or rail throughout the taluk without the subsequent daily observation.

Such a system would entail very little hardship and very little extortion: but it would be of the very greatest help to the plague preventive staff and would go a long way towards counteracting the disastrous consequence which this taluk suffers from its proximity to a district where plague is not only prevalent but is also almost ignored.

(ii)

Copy of Sub-Collector's endorsement No. 66-*P.D., dated* 17*th April* 1916.

Resubmitted.

2. As regards your note about staff, we have a plague supervisor, an assistant sanitary inspector in charge of Hosur town and four circle inspectors each in charge of an observation circle.

3. An observation circle ought to be sufficiently small to admit the inspector's visiting every portion of it in ten days. Strictly however, these observation circles are preventive circles since they are almost always plague-infected and if they are to be regarded as preventive circles they ought to be sufficiently small to enable the inspector to visit every portion once in seven days. (S.Os. Nos. 4 and 5, page 19 of the regulations).

4. Judged by either of these standards the four circles are far too large. Berikai circle contains 93 villages, Bagalur 77, Mattigiri 98, and Talli 154. Of course these villages are not all actually on the Mysore frontier while some of them are small forest villages with very little liability to infection.

5. During the off season an inspector should be able to visit at least six villages a day on the average and during the plague season not more than four. It follows then that at the most no circle should exceed sixty villages. At this rate we should have seven circles, but six would in practice be sufficient, I think. Matagondapalli, a yearly source of infection, might be made the head-quarters of one of the new circles, and the other might be located on the frontier at either Punapalli or Jujuvadi. Major Justice speaks of creating as many observation circles as may be necessary to have a complete control over all arrivals from Mysore side and recommends the disinfection of all merchandise.

6. To do this would require an enormous staff. There are in the first place five roads by which infected goods can be brought into the taluk, namely, the Malur-Berikai road, Malur-Hosur road, Bagalur-Hosur road, Attipalli-Mattigiri road and the Anekal-Talli road, and to stop and disinfect all traffic on each of these roads would mean the entertainment of two inspectors at each road.

7. Besides this, traffic does not only enter by road. Traffic in the Hosur taluk is conducted almost as much by means of pack animals as by carts, and pack animals cross the frontier anywhere and not necessarily by the roads. Further traffic with Matagondapalli, for instance, is probably more by pack animals than by carts. The frontier can be crossed and is crossed at a hundred points; and to disinfect all merchandise as it crosses the frontier is thus an impossibility.

8. It will not be of much use to establish one or two road inspection stations on the most frequented roads. Infection to the big places such as Hosur, Mattigiri and Denkanikota is carried probably by merchandise, but to guard these three places effectively all five roads would have to be watched.

9. But infection to the smaller frontier villages is carried, I believe, in personal luggage as much as in merchandise. All the frontier villagers have relatives on the other side, and there is constant going to and fro not by road, but by foot-path; and so the road inspection stations would be no help here.

10. It was for these reasons that I suggested a reversion to a universal passport system. Major Justice remarks that a universal notification system can only be applied to persons travelling within the taluk. That is because the notification is issued at the place of departure. But my proposal is to have the notification taken out at the place of arrival where one has not been taken out at the place of departure, as under the old plague passport system. This would not of course prevent infection any more than the passport system did. But it would give the plague staff the earliest possible information of the likelihood of infection.

11. While discussing this matter recently with M.R.Ry. Srinivasa Ayyangar, the Personal Assistant Deputy Collector, we agreed that the ideal system was one which would prevent people from an infected area entering an uninfected one.

12. This was in fact the system by which Krishnagiri was kept free from plague during the recent outbreak in Salem when numbers of people fled from Salem to Krishnagiri.

13. The inhabitants of Krishnagiri formed a sort of vigilance committee and suspected arrivals were placed by them in a vacant and isolated house near the railway station and forced to remain there for some days.

14. I doubt however if the system would work as a voluntary system in a rural area of small villages like Hosur taluk. A man is not likely to voluntarily quarantine his relative when he pays him a visit nor is public opinion strong enough in a small village to enforce it. So the system would not prevent infection of frontier villages. I doubt too if it would prevent infection within the taluk. When a village is infected only the wealthy run away. The agriculturist stays by his land. It is only the merchant and the money-lender who run away; and if they move to a neighbouring village which is probably chiefly populated by their debtors I doubt if the villagers would have the courage to refuse admission to their creditor.

15. Certainly they would not if they had not the support of the law; but if the rules were revised so as to make such a system of quarantine legal it is possible that in course of time the system might flourish. For instance a panchayat in each village might be nominated and empowered to refuse admission to any person suspected of coming from an infected area.

16. It may be said that there is a provision in the regulations for the control of persons leaving an infected village, for regulation 10 (*b*) provides that the Collector or plague officer may require the evicted people to reside in particular places. But in practice this is unworkable for we cannot issue and enforce such an order unless we supply a site and hutting materials and to do this would be too costly.

(iii)

Letter—from the Sanitary Commissioner for Madras.
To—the Collector of Salem.
Dated—the 24th March 1916.
No.—846-S.

With reference to the papers forwarded with your letter No. 36 P., dated the 24th January 1916, and referred to in paragraph 9 thereof regarding routes by which plague reaches Hosur taluk every year from the Mysore territory, I have the honour to offer the following remarks.

2. The two points referred to therein which require particular notice are—

(i) *How to guard against the danger of plague being introduced into the taluk from Mysore territory by road through merchandise and the belongings of travellers.*—The answer is by means of *permanent* observation circles within the British territory throughout the length of the Mysore frontier. This was the recommendation accepted by Government when introducing the "Notification System". Steps should be taken at once to create as many *permanent* observation circles as you think necessary to have a complete control over all the arrivals from the Mysore side. If the rules in Part II of the Plague Standing Orders printed on pages 18—20 of the Madras Plague Regulations were strictly followed, I am sure the matter will have been satisfactorily solved. Please see in this connection paragraph 3 of Memorandum No. 1824–1 P., dated 10th October 1913, printed on page 8 of G.O. No. 218 P., dated 31st March 1914. I should like to add in this connection that all grain and merchandise entering British territory should be bulk-broken and the merchandise placed on sand disinfectors for two hours as explained in G.O. No. 419 P., dated 13th May 1911. It is not necessary to empty the grain out of the bags.

No traffic should be allowed at night across the frontier and the halt during the day would facilitate disinfection. The disinfector would be in charge of the observation staff and might be established at some distance half a mile outside the frontier village or town. I know breaking bulk is objected to in some quarters: but I feel confident that such a measure would greatly minimise the risk of infection entering this Presidency.

(ii) *Compulsory notification of arrivals from infected areas by road or rail without the subsequent daily observation.*—This is possible only in the case of infected areas within the British territory from which travellers leave either by road or rail.

The Government have now under consideration a proposal to modify the notification system in the following manner:—

(1) to make the notification holder deliver the notification paper to the local authority in person or by messenger instead of by post and obtain an acknowledgment of delivery from that authority;

(2) if the notification holder changes his immediate destination after taking a notification paper, to make him deliver the paper in the same manner to the local authority of the place to which he actually proceeds.

If these two rules are embodied in the "notification system" rules it would practically amount to the notification holder notifying his arrival from an infected area as suggested in the present papers. As noted already this would be possible in the case of arrivals from infected areas within the British territory. Outside it, observation circles are the only safeguards for detecting arrivals from infected territory. If the traffic happens to be very heavy on any particular road between the Mysore State and the Hosur taluk thus contributing to the easy access of plague through that direction, the opening of a road inspection station on the frontier would certainly reduce the risk to a minimum.

If arrangements are made in the manner suggested above, I think the difficulties brought to notice will disappear to a very great extent.

II

D. No. 2032-S., dated the 23rd May 1916.

Forwarded. I approve generally of the Collector's proposals, although I think that five days' quarantine would be ample. The personal effects of the travellers and their clothes should also be exposed to the sun on the sand disinfector and all merchandise as suggested. Attention in this connection is solicited to the remarks in my letter to the Collector No. 846/S., dated the 24th March 1916

W. A. JUSTICE, Major, I.M.S.,
Sanitary Commissioner for Madras.

To the Secretary to Government, Local and Municipal Department.

III

Memorandum No. 502-1 P., dated 6th June 1916.

In his letter read above the Collector of Salem raises the question of the adequacy of the arrangements now in force to prevent the spread of plague from Mysore into the adjoining British territory. At present frontier notification stations have been established at the places noted in the margin where a large number of travellers enter this Presidency by road from Mysore and observation staffs have also been employed to watch arrivals from infected areas, to obtain information about cases of suspicious illness and to take the necessary preventive measures. Mr. Legh points out that these arrangements are not quite effective against the spread of plague from Mysore and considers it necessary that measures should be adopted for preventing the importation of plague and not merely for obtaining early information of cases of illness. His main proposal is elaborated in paragraphs 7 and 8 of his letter. The Collectors of the districts noted in the margin are requested to offer their criticism thereon as well as on the suggestions contained in the correspondence referred to in Mr. Legh's letter and also to make any other suggestions that they may deem necessary to secure the end in view.

Sivasamudram (Coimbatore district).
Hosur (Salem district).
Teppakkadu (Nilgiri district).

Anantapur.	Coimbatore.
Bellary.	The Nilgiris.
North Arcot.	Malabar.
Chittoor.	South Canara.

C. G. TODHUNTER,
Acting Secretary to Government.

To the Collectors of Anantapur, Bellary, North Arcot, Chittoor, Coimbatore, the Nilgiris, Malabar and South Canara.

Copy to the Collector of Salem.
" " Sanitary Commissioner.

IV

Letter—from F. B. EVANS, Esq., I.C.S., Collector of Malabar.
To—the Secretary to Government, Local and Municipal Department.
Dated—Calicut, the 15th June 1916.
No.—D. 36 P.

In reply to Government memorandum No. 502–1 P., dated 6th instant, I have the honour to state that the wording of Mr. Legh's proposed regulation will hardly do for Malabar, and I do not think that it would be practicable to do what he suggests here.

V

Letter—from F. J. RICHARDS, Esq., M.A., I.C.S., Collector of North Arcot.
To—the Secretary to Government, Local and Municipal Department.
Dated—Vellore, the 26th June 1916.
No.—D. Dis. 382 P.

In reply to Government memorandum No. 502–1 P., dated 6th June 1916, forwarding for remarks the letter of the Collector of Salem regarding the measures to be adopted to prevent the spread of plague from Mysore, I have the honour to solicit the attention of Government to paragraph 5 of my letter D. Dis. No. 214 P., dated 19th July 1915, and to its enclosure 4, printed on pages 8 and 11 of G.O. Nos. 261-61-A. P., dated 29th May 1916, in which I have already dwelt upon the necessity of encouraging the system of *local boycott*. I consider that it is quite necessary to authorise villagers to protect themselves by boycotting or segregating arrivals from infected areas in the manner indicated by Mr. Legh.

VI

Letter—from H. L. BRAIDWOOD, Esq., I.C.S., Collector of Chittoor.
To—the Secretary to Government, Local and Municipal Department.
Dated—the 3rd July 1916.
No.—D. 60 P.

In reply to Government memorandum No. 502–1 P., dated 6th June 1916, calling for suggestions as to the means of preventing importation of plague from Mysore, I have the honour to state that I am in favour of the suggestion of the Collector of Salem that the practice of excluding suspicious arrivals from villages should be put on a legal basis. This system is largely in force already in this district in the case of cholera and seems to be an ancient oriental method of preventing the spread of disease which will be generally accepted by the people.

2. There have been no cases of plague imported from Mysore territory into this district by road during the last two years, probably because Kolar district which immediately adjoins this district has not been seriously infected during this period. During the whole of the same period, there have been four permanent observation circles on the Mysore frontier which have not led to the detection of a single case of plague.

In such areas the Collector has power to entirely exclude merchandise and also to have it inspected and disinfected at the frontiers of his districts (Plague Regulations 5 and 6). It does not seem to be necessary to give any further powers to the authorities.

The only difficulty is for the Collector to decide whether the exercise of such powers is worth the expense caused to Government and the inconvenience and expense caused to the public.

I am inclined to think that such powers should very rarely be exercised. It is likely that such inspection and disinfection of merchandise is merely nominal and is generally evaded by a mutual understanding between the traveller and the inspecting officer. I have tried the system this year to protect Chittoor against road traffic from Vellore and also Palmanēr against similar traffic from Gudiyāttam. In neither case is there any strong reason to believe that this measure of prevention was the cause of the immunity which Chittoor and Palmanēr have up-to-date enjoyed and in the case

of the Gudiyāttam-Palmanēr traffic the proposed inspection and disinfection could not be enforced without the employment of a large extra staff; so the experiment was abandoned as futile.

3. One defect in the system adopted in Salem clearly has been that observation circles have been retained when preventive circles should have been established under the rules and that the circles have been far too large (vide Sub-Collector's endorsement D. No. 66 P. of 1916, dated the 17th April 1916).

I would recommend the establishment of small preventive circles mainly for the purpose of detecting attacks and taking the prescribed action to prevent the spread of plague and would deprecate the extensive disinfection of merchandise suggested by the Sub-Collector as being expensive, oppressive and probably ineffectual.

4. If the statement of the Hosur Plague Supervisor that there are no plague regulations and rules in the Mysore State is correct, it is obviously a question for consideration whether the Mysore Darbar should not be invited to co-operate with the Madras Government in their attempts to check the spread of plague.

Perhaps, however, the Government will not propose to make any suggestion to the Darbar on the subject until some admittedly efficacious method of combating plague has been devised and there seems to be none yet discovered, except inoculation which is not generally popular as a preventive measure.

5. Lastly, we have had compulsory vaccination for many years without objection, compulsory military service has been recently introduced in England, compulsory education is advocated by some of the leaders of the people. Evidently, compulsion is the latest thing in Governmental measures. Why then not introduce compulsory inoculation?

VII

Letter—from A. R. KNAPP, Esq., I.C.S., Collector of the Nilgiris.
To—the Secretary to Government, Local and Municipal Department.
Dated—Ootacamund, the 21st July 1916.
No.—D. Dis. 80 P.

With reference to Government memorandum No. 502–1 P., dated 6th June 1916, I have the honour to report as follows.

2. The conditions in the Wynaad differ radically from what appears to be the state of affairs in Salem. There is only one approach for carts from Mysore to the Gudalur taluk, namely, viâ Teppakkadu, where there is a road inspection station. Foot passengers may with great difficulty evade this station, but there is no evidence that such evasion is practised.

3. For the present I do not consider that any further precautions against the introduction of plague from Mysore into this district are called for. Should, however, this district be more seriously threatened, I should propose to arrange for disinfection of merchandise at Teppakkadu in the manner suggested by the Sanitary Commissioner.

4. As regards Mr. Legh's proposal to give power to villagers to exclude for a fixed period persons and merchandise coming from an infected place, I think that the existence of such a power would be of benefit. It could usefully be applied at Gudalur, when necessary, and its exercise would constitute a defence of the plateau against the importation of plague from Mysore.

VIII

Letter—from I. MACIVER, Esq., I.C.S., Collector of Anantapur.
To—the Secretary to Government, Local and Municipal Department.
Dated—the 25th July 1916.
No.—D. Dis. 251 P

In reply to Government memorandum No. 502–1 P., dated 6th June 1916, I have the honour to state that I think a reference to the map will show that when the Mysore villages near the frontier of this district are infected it must be impossible to prevent the entry of infected persons or merchandise into this district, or to obtain

early information of the arrival of such persons; a man or a cart may enter the district by moving from one side of a field to the other, and it is manifestly impossible for the circle inspectors or anyone else to check such arrivals; several of the roads run in and out of Mysore territory at intervals of a few miles; for instance the road from Madhudi to Penukonda passes through Mysore territory at places at a distance of a few miles on either side of Madakasira, and the only practicable cart route near Madakasira runs through the centre of that town; thus carts cannot travel between our villages in that part of the country without arriving from Mysore in the heart of Madakasira bazaar. I think it is necessary to recognize that when villages in Mysore near our frontier are infected the infection will probably spread over the border, and that the only useful measures that we can take must aim at early discovery of the entry of the disease and subsequent action to control it.

2. Fortunately most of the villages near the frontier are of a very rural character and the inhabitants are simple cultivators who feel no great inconvenience in moving into the fields; consequently they behave in a sensible manner and evacuate their houses when the first cases of plague occur, and also they take their own measures to exclude persons coming from infected areas. These measures are, no doubt, not sanctioned by law, but for the reason that both the persons excluded and those who exclude them are unsophisticated country people, this circumstance leads to no difficulty, and there appears to me to be no need to attempt to legalize their precautionary measures. The case of the few towns near the frontier such as Hindupur, Penukonda and Madakasira, is different; here the residents and visitors include wealthy merchants and lawyers and others who would certainly not submit quietly to precautionary measures which would compel them to turn out their merchandise, or to camp in hastily-erected huts outside their place of destination; if these measures are to be enforced it will, therefore, be necessary to legalize them, and also, in order to prevent great discontent, to erect some sort of quarantine station outside the bigger towns; such measures appear to me to be too costly, and also too oppressive, to be worthy of consideration.

3. I submit herewith a copy of the report of the Sub-Collector, who has gone into the question in a very thorough manner, and whose conclusions agree with my own opinions as stated above.

4. It will be seen that he states that when Hindupur was recently evacuated there was a rush of persons from that town to Penukonda, and that the Penukonda people set up a vigilance committee which was partially successful in enforcing a sort of quarantine; possibly this action saved Penukonda from infection. This case seems to me to illustrate the need of a power to compel all those who have to leave a town that has been ordered to be evacuated to inform the authorities of their place of residence during the period when they may be dangerous as carriers of infection; attempts to trace such persons through the exertions of village officers or circle inspectors must, of course, very often end in failure.

5. The Sub-Collector points out that we do not at present receive sufficiently complete information as to the existence of plague in Mysore villages, and I agree with him, and recommend that the Mysore Darbar be asked to order their Tahsildars of frontier taluks to send immediate information to the Tahsildar of the adjoining British taluk of the outbreak of plague in their villages; our Tahsildars would naturally give the same assistance to the Mysore Tahsildars.

ENCLOSURE.

Letter—from T. J. TASKER, Esq., I.C.S., Sub-Collector, Penukonda.
To—the Collector of Anantapur.
Dated—the 14th July 1916.
No.—D. Dis. 1580.

I have the honour to refer to your N.R.C. No. 787, dated 13th June 1916, calling for report on some suggestions regarding the spread of plague from Mysore into British territory.

2. The two main points for report are—

(i) the adequacy of existing arrangements for preventing the spread of plague from Mysore;

(ii) the particular proposal of the Collector of Salem to legalize the action of villagers who exclude arrivals from infected parts until they have undergone a period of quarantine.

3. The length of Mysore frontier in this division is 315 miles and there are six observation circles (permanent). It is the general consensus of opinion that the work of plague inspectors so far as concerns detecting the entrance of plague, is entirely worthless. I have never yet known a plague inspector to be the first to detect a case of plague in a new locality (I had them under me for four years in the Bellary district) and a perusal of their diaries is sufficient to show that they do not know how to occupy their time. The only value of a plague inspector is that he is a useful assistant to the Tahsildar in dealing with plague when it has once broken out. Until plague is within measurable distance of British territory, the existence of plague inspectors is a waste of money and a nuisance to all concerned. I, therefore, agree with the Collector of Salem in the conclusions stated in the first three paragraphs of his letter No. 192-P. of 1916, but with this exception that I am quite certain that increase in the "preventive" staff would not mean earlier discovery of infection.

Penukonda	42 miles.
Hindupur	94 ,,
Madakasira	179 ,,

4. I regret that the history of the importation of plague into this division is very fragmentary. I enclose a statement gathered from the *Fort St. George Gazette* of villages infected in this division since 1903. The villages are placed in the order of declaration as infected and the statement by itself gives a very good idea of the liability of this division to infection from Mysore.

5. I will take first the only epidemic with which I am personally familiar. Hindupur was infected at the close of 1915 and besides three hamlets of Hindupur, the village of Gollapuram, Palasamudram, Lepakshi, Chakarlapalli and Cholasamudram became infected. Hindupur became infected through the railway goods-shed, and the same thing happened in Bellary town in 1910–11; in other words Hindupur town through its goods-shed, is on the immediate frontier of any station in Mysore, infected with plague, which trades with it. The villages subsequently infected are within the shandy radius of Hindupur and the problem of saving these from plague is part of the general plague problem.

Plague broke out in Madakasira town in October 1913 and the source of infection is recorded as the importation of crackers from Bangalore. In any case infection began with Komatis and trade may be regarded as responsible. The epidemic apparently spread no further than Rallahalli and Chattram, both within "shandy radius".

In 1912–13 plague reached eight villages, including Hindupur town, the infection apparently spreading by road from frontier villages. A very similar outbreak occurred in 1903–1904.

In 1904–1905 there was a big outbreak affecting all three taluks and 47 villages. The infection would appear to have come by road.

6. Turning to the particular proposal made by Mr. Legh. What actually happened when plague broke out at Hindupur in 1915 was that the people scattered with astonishing speed. Rents in Penukonda town went up to fancy prices, and some merchants bodily transferred their businesses there. The Tahsildar and Union Chairman arranged an informal sort of vigilance committee, and a certain number of the new-comers were detained for a day or two at a Chattram near the station and their luggage was exposed in the market. This was enforced at first by private servants engaged by the vigilance committee and later *sub rosa* by a plague inspector. Many escaped this process knowing it could not be enforced, but hundreds arrived in in a few days and if segregation were to be legally enforced, then adequate arrangements would have to be made to lodge them. Arrangements would have to be made immediately and the outlay would be very considerable. I have known small villages in Hospet taluk which put up a *zareba* of thorns all round their village and denied entrance to everyone including Government servants, but it is a very different thing dealing with two towns like Hindupur and Penukonda. I consider that the facts so far as this division is concerned, do not justify what is a very large interference with the liberty of individuals. My experience is that it is merchandise that carries plague and I would not object to the compulsory detention of goods and luggage, but even that would be difficult to enforce and would be no protection to such strokes from the unknown as the outbreaks in Madakasira in 1913 and Hindupur town in 1915. The most rigid destruction of rats within railway premises, once infection is on the line, would in my opinion do something to lessen the danger of long distance infection, and I consider that this proved danger should receive the attention of Government. Once a centre of infection is thus established, I think that it would be feasible to give villagers greater moral assistance in detaining people and goods prior to entrance but I am not prepared to recommend legal compulsion till the system is more wide spread; so far as this district is concerned I would also suggest that an attempt be made to get information from the Amildars of frontier taluks as to the outbreak of plague. At present the bare information that Tumkur or Chitaldrug district is infected is of little value.

IX

Letter—from L. VIBERT, Esq., I.C.S., Collector of South Canara.
To—the Secretary to Government, Local and Municipal Department.
Dated—Mangalore, the 8th August 1916.
No.—D. Dis. 56 P.

In reply to Government memorandum No. 502-1 P., dated the 6th June 1916, I have the honour to state that I do not apprehend that the Collector of Salem hopes to prevent plague entering his district by any system of frontier posts, or notifications.

or passports. Every such system has failed in the past and is doomed to failure in the future and causes in addition a serious waste of public money and enormous inconvenience to the public.

I believe I am correct in stating that an infected human being is, as such, not capable of infecting another human being directly. He is a possible source of danger because he may carry an infected rat flea. For the propagation of the disease, the intervention of the rat is essential. Accordingly, if the measures we take are directed against the rat exclusively, then we may expect some success, but in the nature of things such measures are extremely difficult.

Mangalore gets its plague infection not over the ghauts, because the merchandise so arriving is brought in a way unfavourable to rat transit, but by sea, and apart from merchandise, rats cannot cross the ghauts.

In Coimbatore, we knew that the rats migrated bodily from infected villages travelling a couple of miles to another village and they invariably brought infection with them. On the other hand, when refugees from Karur spread all over the Trichinopoly district in 1914, they did not cause a single local case, the only ones that occurred being in villages quite close to Karur itself which were equally accessible to the rat and in which rat falls were also observed. Again any system which can be evaded and which the public will prefer to evade is *ipso facto* condemned.

It is a serious matter to propose to break up and expose all merchandise in transit. But yet, nothing short of this will stop the rat who is travelling in the merchandise, and nothing at all will stop the rat travelling on his own legs.

With regard to human beings, it seems to me, the only feasible system is to enlist the sympathies of the local residents with you against the stranger arriving from infected areas. Point out that he is a source of danger, that it is suicidal to hush up his arrival or still worse his sickness; and that the public are doing the best service to their village by watching him and denouncing him, if need be, to the authorities who will then remove him. This actually worked in Trichinopoly district in 1914 and 1915, and the people in the towns and villages at once reported arrivals from Salem and Karur and I doubt if any were concealed. But as I said above, the infected or suspected individual is the least dangerous source. Accordingly, I would say, let the local authorities and the public generally be told and taught to report all arrivals from infected areas and their health; and let all possible rat-bearing merchandise be opened out. Merchandise in sufficient bulk to harbour rats will necessarily be brought along main roads. If, to evade the rules, the parties break up the stuff and put it in headloads or on pack animals for transport by paths, they are doing the very thing we want them to do, evicting the rat; accordingly, the rules will hardly, in practice, be defeated, though they may be technically evaded. The Collector of Salem wishes to have each village protected and arrivals excluded and merchandise held up. Where are the parties to live meanwhile? They will pass on with their merchandise to the nearest non-protected village and infect that, or if they belong to the first village, the villagers will sympathise with them and smuggle them in. No: I suggest let them come in, but as marked people—the villagers themselves can be brought to see that—and break up your merchandise at set places on the main roads, and no more is necessary. I would observe that if the villagers want the grain, etc., they will get it and no one will consent to the loss and damage caused by twelve hours' spreading in the sun, either buyers or sellers.

If, in practice, the rat flea has come as far as the village gates in that merchandise, he will get to the village. The rat cannot come, if the merchandise has been broken up at a distant frontier station; whereas, if it is not to be broken up till the village itself, then you have brought your rat to the village after all; and all your precautions are wasted.

X

Letter—from A. F. G. MOSCARDI, Esq., I.C.S., Collector of Bellary
To—the Secretary to Government, Local and Municipal Department (Plague).
Dated—the 16th August 1916.
No.—D. Dis. 264-Plague.

I have the honour to reply to Government's memorandum No. 502-1 P., dated the 6th of June 1916.

2. I have consulted the Divisional Officers, who are generally in favour of the proposal, with some criticism in detail. For instance, it is proposed that some words

like "or other authority" might be added after "village headman," to allow for a village forming a panchayat to deal with the matter; that some arrangement is required to permit people and merchandise to pass through a village by road; that the quarantine of persons could not be enforced in the rainy season without great hardship; and so on.

3. The frontier question is more serious in this district than in any other, for this district has three foreign territories on its borders, in all of which plague is constant, and not merely seasonal as it usually is in this Presidency. I can think of no means of preventing people and merchandise from crossing the borders into the district; and so long as this crossing takes place, occasional infection of villages in the border taluks is inevitable.

4. The plan of quarantining arrivals is in fairly common use in this district, being adopted by the villagers both spontaneously and under official encouragement. In the most favourable conditions it operates fairly well up to a point; but the villagers must be unanimous upon the case of each arrival, and this is a state of things which is not likely to endure for long. A good example of the success and failure of the proposed plan was furnished in 1914 by a large union village named Hirehal, ten miles south of Bellary. In spite of a very severe epidemic of plague in Bellary causing hundreds of people to seek refuge in neighbouring small towns, this village maintained itself free from infection for about two months by means of Mr. Legh's scheme; and it was not till a relation of the Reddi was smuggled into the village that the plague began there. Of course, if the village were factious, it would be incapable of enforcing a quarantine for so long as two months; but even in the most favourable circumstances, the quarantine would always be broken by the arrival of any big landlord or money-lender of the neighbourhood or by relations of any such person who might be living in the village.

5. It is conceivable that a village quarantine system, fortified and supplemented by regulations providing punishments for infringements, might work with somewhat greater certainty. But it would be intensely unpopular, and would be regarded as an interference with personal liberty at least as serious as that which caused the passport system to be so universally condemned. And, to work such a system on a useful level of efficiency, the inspecting staff would have to be numerous and inam-proof.

XI

Letter—from A. R. CUMMING, Esq., I.C.S., Collector of Coimbatore.
To—the Secretary to Government, Local and Municipal Department (Plague).
Dated—Coimbatore, the 23rd September 1916.
No.—D. Dis. 279-Pl.

With reference to Government memorandum No. 502-1 P., dated 6th June 1916, calling for criticism on certain proposals made by the Collector of Salem for preventing the introduction of plague from the Mysore State into British territory, I have the honour to submit the following report.

2. The main proposal refers to the introduction in the Plague Regulations of a rule on the lines suggested in paragraph 7* of the Salem Collector's letter No. 192-P., dated 10th May 1916. The method of disinfection therein referred to is presumably the one laid down in the instructions communicated with G.O. No. 419 P., dated 13th May 1911. In order to test the practicability of this mode of disinfection, the District Medical and Sanitary Officer, Coimbatore, who is also the Superintendent of the Central Jail, constructed a small sand-bath in the Jail compound and recorded the results hourly for twenty days in July last as shown in the annexed table. He found that according to the temperature recorded, persons would have to be detained for days together, waiting till the sand-bath reached a lethal temperature and that the period of detention would be longer during the winter months which is the true plague season. It is for the Sanitary Commissioner and Surgeon-General to say whether and, if so, how far this method of disinfection requires modification in the light of the experiment made by Lieutenant-Colonel Fearnside. But assuming that a simple and

> "That where the Collector notifies that measures for the protection of a given village or given area against arrivals from infected areas are necessary, it shall be lawful for the village headman (or any one appointed by or assisting him in the matter) to prevent any person entering the village habitation or any merchandise being brought into or sold in the village market or village site. Persons suspected of so arriving may be prevented from entering for a period of seven days and merchandise till it has been exposed for twelve full hours of sunshine."

at the same time efficient system of disinfection can be prescribed, I see no reason why a regulation somewhat on the lines suggested by the Collector of Salem should not be passed. It is for consideration, however, whether it should not be restricted to the disinfection of personal effects including of course clothing. If, as I understand, plague patients—other than those suffering from pneumonic plague—are not in themselves a source of danger, I do not follow why it should be necessary to quarantine people for seven or even five days. What *is* necessary and paramountly necessary is that the personal effects and clothing of persons emerging from an infected area should be disinfected and when this has been done the people might be *at once* allowed to enter a village. It would therefore suffice to give village munsifs power to prevent persons from entering a village until their samans and clothing had been disinfected. This would cover consignments of grain and other commodities arriving from suspected areas.

3. It may of course be argued that every village munsif cannot be implicitly trusted to carry out such orders; that, however, is no reason why powers should not be taken to enable a village munsif to do so. The experiment may, in the first instance, be tried in the Salem district and if found successful, it may be extended to other districts.

4. Regarding the suggestion that the existing notification system should be modified, I have to state that, with reference to paragraph 2 of G.O. Nos. 261-61-A P., dated 29th May 1916, a separate report is due to Government by the 1st of June 1917 after another year's working of the system and I reserve any comments on that system till then.

5. As regards the suggestion about the strengthening of the observation circles and notification stations on the border of the Mysore territory, I have under consideration certain suggestions for altering the system at present in force in this district. It occurs to me that as Sivasamudram is not the only means of entrance into British India from Mysore on the Kollegal frontier, a notification station at Sivasamudram serves little purpose and that it would afford a much greater safeguard to the Presidency as a whole if we concentrated our efforts on this side of the dense jungle which separates the whole of this district except the Kollegal taluk and the Talavadi firka of the Gobichettipalaiyam taluk from Mysore. There are, I believe, only two points at which traffic from the plateau emerges on the plains, viz., the Hassanur ghaut road in Gobichettipalaiyam and the Barghur ghaut in Bhavani, and I cannot but feel that an effective system of quarantine or disinfection or both at these points would be better than any number of observation circles on the Kollegal frontier. I propose consulting the Revenue Divisional Officers and District Medical and Sanitary Officer on the point and shall report further in due course.

ENCLOSURE.

Table showing the temperature. sand-bath, Central Jail, Coimbatore.

Date.	Hours.									
	8 a.m.	9 a.m.	10 a.m.	11 a.m.	12 noon.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.
5th July 1916	92	103	109	111	115	116	118	121	108	93
6th ,, ...	85	102	116	*127*	*130*	*128*	*127*	112	111	101
7th ,, ...	80	98	101	109	119	110	107	110	100	94
8th ,, ...	80	94	107	115	*120*	*123*	*122*	111	105	98
9th ,, ...	85	99	115	*126*	*131*	*132*	*123*	*121*	114	107
10th ,, ...	90	106	117	*120*	*123*	*122*	117	*120*	115	103
11th ,, ...	85	88	101	114	*123*	*120*	118	111	105	100
12th ,, ...	84	110	103	110	*120*	*123*	117	110	107	93
13th ,, ...	83	85	94	114	113	118	*123*	118	107	88
14th ,, ...	78	82	95	98	110	102	108	102	99	92
15th ,, ...	77	83	85	83	93	94	96	95	95	93
16th ,, ...	90	110	*123*	*133*	*134*	*136*	*131*	*123*	116	101
17th ,, ...	75	77	80	94	105	109	113	109	95	94
18th ,, ...	82	107	110	*122*	*131*	*128*	*129*	101	90	89
19th ,, ...	82	95	103	112	115	*120*	119	111	102	90
20th ,, ...	83	103	*120*	*126*	*131*	*136*	*134*	*127*	118	109
21st ,, ...	85	90	97	95	106	103	95	93	92	91
22nd ,, ...	80	92	103	113	117	118	113	112	101	97
23rd ,, ...	82	88	107	112	113	110	100	95	94	90
24th ,, ...	85	95	107	110	108	102	98	92	91	..

Coimbatore, 25th July 1916.

C. FEARNSIDE, Lieut.-Col., I.M.S.,
District Medical and Sanitary Officer.

Order—No. 543 P., dated 23rd December 1916.

These papers relate to the efficiency of certain portions of the arrangements in force in this Presidency for preventing the spread of plague from Mysore into the adjoining British territory.

2. In his letter, dated 10th May 1916, the Collector of Salem stated that there can be no doubt that the epidemic is imported at certain seasons every year, the means of transport being human clothing and merchandise, and that the existing arrangements—the establishment of frontier notification stations and the formation of preventive circles—however useful they may be in the matter of securing early information as to cases of plague, are defective in that they do not prevent its importation. He therefore advocated (*a*) that the plan voluntarily adopted in some villages in the Krishnagiri taluk and around Salem town, of preventing persons arriving from infected areas in the Mysore State from entering the villages for seven days from the date of arrival might be recognised and made legal, and (*b*) that all merchandise from such areas should be similarly detained until it had been exposed to the sun for a period of not less than twelve hours.

These suggestions were referred to the Collectors of districts adjoining Mysore for report.

3. The first proposal is supported by the Collectors of North Arcot, Chittoor and the Nilgiris, while the Collectors of Anantapur, South Canara and Bellary are not in favour of it. The reports of the Collectors of Anantapur, Bellary and Chittoor show that the villagers in those districts are even now spontaneously (and with official encouragement in the case of Bellary) adopting to some extent a system of excluding arrivals. The Collector of Malabar considers that it would not be practicable to carry out in his district the measure suggested by the Collector of Salem. The Collector of Coimbatore is of opinion that people from infected areas need not be excluded for any length of time provided their clothing and other articles are disinfected.

4. As regards the proposal that all merchandise should be disinfected at the outskirts of the frontier villages, the Collectors of Chittoor, Bellary and Anantapur are not in favour of it, while those of the Nilgiris and Coimbatore support it. The Collector of Malabar considers this measure also to be impracticable in his district. The Collector of South Canara suggests the adoption of a rule that merchandise entering by the main roads should be bulkbroken with a view to evicting rats which may be in it.

5. The Government have carefully considered these proposals and they have come to the conclusion that, so far as persons arriving from infected areas are concerned, it is desirable to encourage the voluntary system of self-protection adopted by the villagers in some districts by legalising their action in so far as the aim is to keep out arrivals from infected areas for purposes of disinfection of their clothing or as a measure of quarantine for a period not exceeding five days. Where, however, the entire clothing of the arrivals is immersed in boiling water for one hour, further detention of the owners is unnecessary and in cases where the clothing is treated by exposure to strong sunlight the period of detention need not exceed one day.

6. As regards the disinfection of merchandise, the Government of India have, in paragraph 39 of their Resolution printed in G.O. No. 878 P., dated 13th August 1900, disapproved of the disinfection of ordinary merchandise. As, however, grain has been found by experience to be a carrier of plague infection, the Government consider that large consignments which are likely to harbour rats should be bulkbroken with a view to the eviction of rats or rat-fleas. For this purpose, it is not necessary to empty the bags, but they should be removed from the carts and exposed to the sun for two hours on each side. Coupled with this there should be systematic trapping of rats in railway goods-sheds in suspected localities with reference to rule 6 of the Mufassal Plague Regulations.

7. The measures contemplated in the previous paragraphs should be given a trial in the first instance in the districts bordering on the Mysore State. The Collectors concerned are requested to make the necessary arrangements to give effect to them at as early a date as possible in villages in which the inhabitants are anxious to adopt them. It is not intended that these measures should be forced upon villagers who are opposed to them. Action on behalf of the villagers should be taken by their panchayats or headmen with the previous sanction of the Revenue Divisional Officer

8. The Collectors concerned will be requested to submit proposals for reorganising, if necessary, the staff employed for observation duty in their districts with reference to these orders.

9. The Collector of Anantapur suggests that the Mysore Darbar may be requested to issue instructions to the amildars of frontier taluks to send immediate intimation of the outbreak of plague in their villages to the tahsildars of the adjoining British taluks. From Plague Standing Order 62 it will be observed that the Mysore Darbar has already issued necessary instructions in the matter and if Collectors will report specific instances of failure to obey them, the Darbar will be addressed. Collectors should also endeavour to obtain the earliest possible information of arrivals from infected villages from the villagers or village headmen.

0. The District Medical and Sanitary Officer, Coimbatore, is reported to have made some experiments to test the practicability of the mode of disinfection described in G.O. No. 419 P., dated 13th May 1911, and the results obtained have been recorded in the statement appended to the letter from the Collector of Coimbatore. The attention of the Sanitary Commissioner will be drawn to this. It is apparent that the system in question is not fully effective in the colder months.

11. The appended notification will be published in the *Fort St. George Gazette.*

(True Extract.)

R. A. GRAHAM,
Acting Secretary to Government.

To the Collectors of districts bordering on the Mysore State.
,, all other Collectors.
,, the Sanitary Commissioner.
,, the Surgeon-General.
,, the President, Corporation of Madras.
,, the Honourable the Resident in Mysore (with C.L.)
,, the Legislative Department.
, the Sanitary Commissioner with the Government of India.
Gazette.
Editors' Table.

APPENDIX.

Notification.

In exercise of the powers delegated to him under the Epidemic Diseases Act, 1897, the Governor in Council is pleased to direct that the Madras Plague Regulations in force outside the Presidency town published in notification No. 117-P. on pages 375 to 381 of Part I-A of the *Fort St. George Gazette*, dated 26th May 1914, be amended by the insertion of the following rule :—

14-A. The panchayats or headmen of villages which are exposed to infection from the Mysore State may, with the previous sanction of the Revenue Divisional Officer, prevent persons arriving or suspected of arriving from infected areas in that State, from entering the villages for a period not exceeding five days from the date of arrival unless their clothing and other personal effects are disinfected. Consignments of grain arriving from infected areas may similarly be prohibited from entering the villages until the bags have been removed from the carts and exposed to the sun for two hours on each side.

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE.

GENERAL AND REVENUE SECRETARIAT.

No. 5481 / San 8 4-16-5

*Dated Bangalore, . . .21.2. . 191*7.

Issued.
Bdry mr B. Sabhadan

From

D. M. NARASINGA RAO, Esq., B.A., B.L.,

Secretary to the Government of His Highness the Maharaja of Mysore,

General Department.

To

Rajakaryapravina

Rao Bahadur T.V.Arumugam Mudaliar Esq., M.B.C.M.,

Sanitary Commissioner in Mysore.

SIR,

In forwarding herewith

~~I am directed to enclose~~ for your perusal and kind return a copy of the Proceedings of the Madras Government No.543 P. dated the 23rd December 1916 authorising the issue of a Notification (page 16 of the Government order) enjoining certain plague preventive measures in villages bordering on the Mysore State. ~~With reference to the above notification, I am to observe that the action taken by the Government of Madras seems to require investigation and~~ I am to enquire whether it is only from Mysore that plague enters the British Territory and whether the reverse does not also happen. I am to request that the statistics in this connection may kindly be examined and that a detailed report supported by available statistics may be submitted to Government before the close of the next week.

I have the honor to be,

Sir,

Your most obedient servant

Secretary to Government,

General Department.

Please join GRs
as desired
21/2-17

KNN

No. Q. C. 389-4 Office of the Sanitary Commissioner
in Mysore,
Dated, Bangalore, 5th March 1917.

From

M. Srinivasa Rao, Esquire., M. A., M.D., D.P.H., Etc.,
Sanitary Commissioner with the Government
of H. H. the Maharaja of Mysore, Bangalore.

To

D. M. Narasinga Rao, Esquire., B. A., B. L.,
Secretary to the Government of H. H. the
Maharaja of Mysore, General Department,
BANGALORE.

Sir,

I have the honor to reply to your letter No. 5487/ San dated the 21st February 1917 as follows:-

The Sub-Collector of Hosur in his letter dated the 11th December 1915 to the Collector of Salem admits that there is " no satisfactory or conclusive evidence of the routes through which plague reaches Hosur Taluk". All that he can say from a study of 15 years' statistics is that plague begins in Hosur Taluk in the months of July August or September, that it begins in one or two villages and from there spreads to neighbouring villages and thus he is unable to see the source of infection to the village first infected. " Later on, however he says" " I find of course a large number of first cases which are undoubtedly imported from Mysore but as often as not there were no subsequent cases and so no conclusions can be drawn"; also that " apart from these isolated cases I can adduce no evidences but there remains the general impression

GPB—50,000—26-4-15

1917

From The Sanitary Commissioner in Mysore. Bangalore

6 MAR 1917

To The Secretary to Govt. General department Bangalore.

Dated 5. 3. 17.

Despatched

Received

General No. G. C. 389-4

No.

Enclosure No. 4.

Submitting a report on the subject of importation of plague said to take place from Mysore into British territory—

impression to be drawn from the fact that it is always the - villages on or near the frontier that are infected". His - final opinion is " Although the positive evidence does not amount to much, it is fair to presume that plague spreads to this taluk from Mysore because there is a great deal of plague in Mysore (more than appears in the weekly reports) and because practically no steps are taken to control it".

2. I fail to ~~say~~ see why he should think that actually more plague cases occur than are shown in the weekly reports, and his dictum that no steps are taken to control it, is not consistent with facts. Out of the 16 villages of Anekal I visited in January 1917, 3 were frontier villages in which plague had actually occurred. Evacuation of these villages was at once resorted to. There was no panic-stricken emigration of Mysore villagess into other Mysore villages, much less into British villages. Some inoculation also had been done and dis -infection of the houses was in progress prior to their re-occupation. That the measures we adopted here in Mysore do not happen to be precisely identical with those in force in Madras, surely does not mean that epidemics of plague here are " almost ignored".

3. I enclose statements shewing (i) the number of plague deaths in the Mysore State for each of the 10 years ending - 1915 as compared with the plague mortality in the Madras Presi -dency as a whole ~~and in the Salem district~~ and (ii) the - number of plague cases and deaths in the frontier taluks - - annually from the commencement up to the end of 1914-15. The statements seem to me to reveal that the annual rise and fall in the plague figures in Madras do not correspond with the - fluctuations in the intensity of plague in Mysore and that, excepting the Davangere taluk the disease in the frontier - taluks of Mysore shows a decided tendency towards decline as

as years go by. The figures relating to the Davangere taluk are significant. They show that, far from the Mysore frontier taluks contributing to the extent complained of towards the prevalence of plague in British territory, we in Mysore are exposed to a continuous stream of infection from what Col. Smyth in his letter to Government, No. 234 of the 14th June 1906, characterises as " that hot-bed of plague - Bombay Presidency."

4. Now in regard to the Salem District, I have had a - statement compiled from the daily returns for 1914-1915, showing the names of villages infected with plague, (irrespective of distance from the frontier) in each of the 5 Mysore taluks that about on the district, the dates of first attack and the total number of plague cases and deaths reported during each of the two years. The Sub-Collector, Hosur, states it as the result of his study that plague in his District usually begins during the quarter - July, August and September - so that one has only to see how much plague prevailed on the other - side in Mysore these three months to see the effect it must have had on the course of the disease in the adjoining British territory. I find that out of a total of 53 villages that were infected during 1914 in the 5 Mysore taluks, only 6 returned cases and deaths in the course of July, August and September. In 1915, the total number of villages affected was 61, out of which only 7 reported plague mortality amounting to a total of 9 deaths during the three months. And yet the total number of plague deaths in the Salem District in 1915 was 1506! In the absence of detailed figures for the Salem district similar to those examined for Mysore, it is difficult to draw definite conclusions but I believe I am right in saying that the " general inference" drawn by the Sub-Collector cannot be substantiated.

5. It is tacitly assumed that the people and merchandise

merchandise are the means for the carrying of first infection. Prof. Simpson in his treatise on plague has the following words in tracing the course of infection in Bombay:- " It was observed as a curious phenomenon that the progression of disease was intimately associated with the migration of rats. It was not the localities to which people were fleeing from infected districts that were showing grave infection but those to which rats were migrating". No observations are brought forward to show that there was any migration of rats but much is made of the possible migration of a few people.

6. If, as is admitted, frontier villagers have relatives on the other side and there is constant going to and fro by road and foot-path, it appears reasonable to assume that infection may be carried in one direction quite as frequently as in the opposite one. No statistics are given as to the number of persons going from Mysore to the British side and vice versa and also as to the amount of merchandise interchanged between Mysore and British villages.

I have the honor to be

S I R,

Your most obedient servant,

M Srinivasaraw

Sanitary Commissioner.

Statement Showing the Villages in the
that reported Cases of Plague dur

Kankanhalli				Anekal.				Hos	
Name of village.	Date of 1st attack	Cases	Deaths	Name of village	Date of 1st attack	Cases	Deaths	Name of village	Date of
	Nil			Karaganur	18-12-13	1	1	Hoohalli	19 8-
				Sakalvara	30-12-13	9	4	Bhaktharhalli	15-
				Byagadnahalli	2-3-14	4	4	Kalthiganur	17-
				Singena-Agrahara	9-3-14	2	2	Devangundi	20-
				Chendala-Mattibele	14-3-14	3	2	Gangale	20
				Singenadoddi	21-2-14	4	4	Junnagara	24-
				Kankanhalli	27-7-14 to 30-9-14	42	26	Hosahalli	27-
				Menisagarahalli	19-11-14	2	-	Pujanagrahara	5-
				Healaligay	20-11-14	1	-	Sarkunur.	10-
				Archalli	29-11-14	1	1	Kurubarhalli	2-
				Athibele	9-9-14	30	17	Bisnahalli	10-
				Bidarguppa	25-11-14	5	3	Besarhalli	10-
				Jadavanahalli	16-11-14	9	3	Bettur -	22-
				Jigale.	30-11-14	7	2	Kadgodi.	27-7-14
				Avadadnahalli	26-12-14	2	1	Pethanahalli	1-
				Kathithimmanda	19-12-14	3	3	Bide-Sivale	12-8-14
				Kammasandra-Agrahar	16-12-14	5	4	Karpanhalli	2-
				Anekal	8-11-14	59	41	Anjanahalli	23
						167	117	Theingur	21-
								Doddallur.	19-
								Ankanhalli	23-
								Hindignal	2-
								Helavagal	13-
								Hassigala	12-
								Hoskote.	17-
Paruvikapalya.	30-1-15	1	1	Kudlu	20-12-14	1	1	Gullahalli	1915 27-
				Dodlagera	29-12-14	1	1	Dandupalya	5-
				Avadadnahalli	26-12-14	9	7	Thimmasandra	5-
				Jigane	30-11-14 to 1-2-15	12	4	Kallakunte-Agrahara	24

frontier taluks of the Salem District
ng the years 1914 and 1915.

Kote.			Malur.				Bowringpet.			
Date of 1st attack	Cases	Deaths	Name of village	Date of 1st attack	Cases	Deaths	Name of village	Date of 1st attack	Cases	Deaths
14										
1-14	8	2	Sidhanayakanhalli	18-3-14	4	3	— Nil —			
1-14	2	0	Midagarahalli	17-3-14	1	0				
1-14	5	2	Dodkallahalli	6-5-14	1	1				
1-14	1	0	Narasapur	16-5-14	12	12				
1-14	3	1	do Dhadatur	7-7-14	2	2				
1-14	1	1	Lambichalli	20-11-14	10	10				
11-14	3	2	Agara.	21-12-14	4	3				
2-14	2	1								
2-14	1	1								
2-14	8	4								
3-14	2	1								
3-14	3	2								
7-14	1	1								
to 14-9-14	30	21								
10-14	4	3								
to 23-10-14	26	18								
10-14	7	5								
9-14	10	8								
10-14	11	7								
10-14	10	10								
11-14	5	3								
11-14	32	27								
12-14	6	4								
11-14	16	15								
7-14	125	83								
	322	222								
1-15	1	1	Kanpanhalli	12-2-15	2	1	Kaunur	13-2-15	13	6
1-15	2	2	Nakkanhalli	26-2-15	4	3	Madivala	2-2-15	1	1
1-15	7	4	Hosahalli	8-3-15	1	1	Kongarahalli	13-12-15	5	2
1-15	14	10	Kavalgerenhalli	13-3-15	10	8				

Con

Kankanhalli taluk				Anekal				Ho
Name of village	Date of 1st attack	cases	deaths	Name of village	Date of 1st attack	cases	deaths	Name of village
				Muttugatte	23-1-15	5	5	Hasigala
				Bidarguppe	25-11-14 to 8-2-15	9	3	Konurhalli
				Solur	16-1-15	5	2	Kelvagal
				Maisandra	27-1-15	3	0	Kosahalli
				Kolathur	27-1-15	3	1	Chikk-hullar
				Kavalahosahalli	10-2-15	6	4	Sollibele
				Siddikatte	14-3-15	1	-	Banahalli
				Anekal	8-11-14 to 20-4-15	98	70	Hindigaal
				Lakkonnisagara	21-4-15	1	1	Kandugodi
				Medihalli	17-4-15	1	1	Kamsandra
				Doddahagade	13-7-15	3	2	Hoskote
				Bommasandra	1-8-15	4	1	Ramapura
				Thirumagondhalli	29-7-15	3	3	Arihalli
				Muthanallur	18-8-15	4	-	Kamarasanahalli
				Thelagarahalli	22-9-15	1	-	Handenhalli
				Haranagatta	18-10-15	2	-	Somlapur
				Gopasandra	12-10-15	13	8	Kugur
				Kalagrahar	6-11-15	12	8	Khaji-Somenhalli
				Ranjapur	29-11-15	1	0	Kamamangala
				Chicka-Thimma Sandra	28-10-15	3	3	
				Hosenur	8-12-15	4	3	
				Beethamanhalli	31-10-15	8	3	
				Addibele	18-12-15	5	3	
				Yedavanhalli	15-12-15	3	2	
						221	156	

Bangalore

Dated 5th March 1917

Annexed.

Kotte			Malar				Bowringpet.			
Date of 1st attack	Cases	Deaths	Name of village	Date of 1st attack	Cases	Deaths	Name of village	Date of 1st attack	Cases	Deaths
2-11-14 to 22-2-15	19	18	Malur	31-3-15	21	16	Bowringpet	15-11-15	17	12
16-2-15	6	5	Kidermangala	13-5-15	6	6				
3-12-14 to 26-2-15	10	8	Hanumanthapura	16-12-15	3	2.				
10-2-15	4	4								
5-3-15	4	4								
19-3-15	1	-								
11-2-15	5	3								
18-3-15	5	5								
18-3-15	13	11								
26-3-15	1	1								
28-3-15	1	1								
5-4-15	3	1								
2-4-15	1	1								
22-7-15	2	2								
3-8-15	17	6								
8-9-15	2	1								
9-10-15	11	3								
2-12-15	11	8								
25-11-15	19	9								
	135	97								
	60	42								
	75	55								

M Srinivasa Iyengar
Sanitary Commissioner

Comparative Statement of deaths from Plague in the Mysore State and Madras Presidency

Mysore State				Madras Presidency			
Years.	Rural	Urban	Total.	Years.	Rural	Urban	Total.
1906			2960	1906	463	435	898
1907	6860	5563	12423	1907	1577	1295	2872
1908	4777	2377	7154	1908	2207	1151	3358
1909	1577	2471	4048	1909	1751	2093	3844
1910	2434	3906	6338	1910	Figures not available in this Office.		
1911	9140	5477	14617	1911	11775	3410	15185
1912	3147	2229	5376	1912	4251	2400	6651
1913	2171	1328	3496	1913	2192	2938	5130
1914	2201	2412	4613	1914	2555	2547	5102
1915	2198	1349	3547	1915	1801	2088	3889

Sanitary Commissioner's Office
Bangalore 5th March 1917

M Srinivasa Rau
Sanitary Commissioner

Statement Showing the attacks and deaths from plague in 22 of the frontier taluks of the Mysore State from 1898-1899 to 1914-15.

Years.	Hosakote		Kankanhally		Anekal		Gundlupet		Hassudermanhalli		Nalvalli		Nalur		Goribidnur		Rayapalli		Mulabagal		Sira		Pavagada		Ranjatabad		Nagar		Sagar		Sorab		Channagiri		Nanjangud		Jagalur		Davangere		Nelakalmangala		Challakere	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1898-99	357	325	173	128	1382	1134	1	1	5	4	28	24	265	221	311	224	-	-	10	9	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1899-900	213	157	67	59	296	227	-	-	46	23	56	36	38	31	13	13	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	514	296	-	-	-	-
1900-1901	207	161	61	54	1018	756	98	76	22	16	-	-	26	22	1	1	-	-	16	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	451	340	-	-	-	-
1901-1902	149	95	11	8	1515	1115	190	153	194	143	176	146	67	51	-	-	-	-	42	31	-	-	-	-	-	-	-	-	6	4	16	12	6	5	-	-	2	2	480	353	63	54	-	-
1902-1903	866	825	46	39	1798	1262	202	174	146	111	163	114	145	100	2	1	1	1	205	158	-	-	-	-	1	1	-	-	-	-	94	63	376	263	34	19	91	62	312	220	43	30	7	6
	358	313	72	58	1202	899	58	81	83	59	85	64	108	85	65	48	1/5	1/5	55	42	-	-	1/5	1/5	1/5	1/5	-	-	1	1/5	22	16	76	54	7	4	19	13	351	248	21	17	1	1
1903-1904	836	830	172	111	1259	788	323	275	64	39	124	98	361	245	21	14	19	16	69	38	1	1	-	-	23	19	1	1	17	11	150	79	671	509	1	-	151	82	810	578	184	134	74	60
1904-1905	240	202	57	48	378	317	-	-	-	-	129	108	86	51	110	71	30	17	287	229	-	-	-	-	-	-	1	1	7	5	309	180	767	523	-	-	141	86	810	522	135	68	15	9
1905-1906	-	-	10	9	139	80	-	-	24	20	11	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34	25	21	14	8	8	-	-	4	2	78	65	-	-	-	-
1906-1907	20	16	29	20	178	150	-	-	-	-	-	-	1	1	-	-	-	-	1	1	-	-	-	-	-	-	12	7	-	-	-	-	-	-	9	9	-	-	1	1	-	-	-	-
1907-1908	564	376	268	168	1705	912	88	64	90	71	1	1	129	95	40	26	-	-	154	110	3	3	-	-	-	-	11	6	9	5	-	-	39	30	17	9	29	24	139	124	34	20	-	-
	332	285	103	71	732	449	82	68	36	26	53	43	115	78	34	22	10	7	102	76	1/5	1/5	-	-	5	4	5	3	13	9	96	55	297	214	5	4	65	39	368	258	70	44	15	14
1908-1909	-	-	-	-	19	12	63	52	24	18	6	3	56	38	1	1	-	-	-	-	-	-	-	-	-	-	12	7	-	-	8	5	85	58	23	16	-	-	3	1	-	-	-	-
1909-1910	61	61	45	31	277	154	58	56	9	3	14	13	6	6	1	1	-	-	-	-	-	-	-	-	-	-	8	6	-	-	13	10	69	50	25	16	-	-	120	98	-	-	-	-
1910-1911	40	30	54	40	125	78	135	116	10	5	45	31	24	18	2	2	-	-	40	30	1	-	-	-	6	5	-	-	1	1	10	2	131	91	15	10	-	-	634	442	-	-	-	-
1911-1912	355	301	151	98	306	227	33	30	31	21	41	33	373	287	99	85	106	80	33	29	48	37	-	-	2	1	-	-	-	-	33	26	424	280	20	11	-	-	860	540	161	119	110	74
1912-1913	68	50	82	68	78	60	60	48	80	62	150	132	40	28	93	70	-	-	21	13	-	-	59	47	3	3	-	-	-	-	18	12	252	147	-	-	-	-	-	-	-	-	-	-
	105	88	66	47	161	106	70	60	31	22	51	42	100	75	39	32	21	16	19	14	10	7	12	9	2	2	4	3	1/5	1/5	16	11	192	125	17	11	-	-	323	210	32	24	22	15
1913-1914	169	100	-	-	35	28	5	4	57	52	64	50	38	32	-	-	-	-	64	52	-	-	-	-	7	5	-	-	-	-	59	34	101	69	-	-	-	-	8	4	-	-	-	-
1914-1915	218	149	1	1	258	160	56	41	254	195	1	-	59	49	67	49	-	-	1	1	-	-	-	-	-	-	-	-	-	-	179	101	61	28	-	-	31	1	789	490	149	-	-	-

5 - MAR 1917

M Srinivasa Rau

Pol. 1916 Jan 78
Ecclesiastical
San 8/4-16 Sl 7

To

The First Assistant
to the Hon'ble the Resident

Sir,

I am directed to invite reference to the correspondence leading up to the proceedings, dated the 23rd Dec. last, of the Govt. of Madras, forwarded with your letter No. 111 of the 2nd ultimo and to state that certain inferences and observations made therein in regard to the spread of plague from Mysore into the adjoining Districts of the Madras Presidency are based on insufficient data and disclose the existence of a misapprehension on the subject which, the Govt. consider it is desirable to remove.

2. In his report of the 11th Dec. 1915, it is observed the Sub-Collector of Hosur starts with the admission that

he can find "no satisfactory or conclusive evidence of the routes through which plague reaches Town Taluk" but concludes that it is "fair to presume that plague spreads to this Taluk from Mysore." The Collector of Salem has also endorsed the inference that it is from Mysore that the Salem Dt. is annually infected.

3. The Sub-Collector bases his assumption ~~on~~ on the ground that "there is a great deal of plague in Mysore (more than appears in the weekly reports)" and that "practically no steps are taken to control it." It is, however, not clear why he doubts the accuracy of the Mysore reports or presumes that the epidemic is ignored in the State. As a matter of fact due attention is given by the local officers to prevent the

infection appears in any locality the people are advised to get themselves inoculated, to evacuate their houses and to reoccupy them only after disinfection. The Durbar have also provided the necessary facilities to enable the people to have recourse to these preventive measures. The above arrangement is in force as effectively ~~as~~ along the frontier as in the interior of the State. For instance when the epidemic broke out in January last in the Sirekal Taluk, which is on the Deccan border, it is reported by the Dist. Sanit. Commr, who inspected it at the time, that the three frontier villages which were infected were at once evacuated and ~~[illegible]~~ that there was no panic stricken emigration of the people even into the Mysore villages.

4 From the Statistics of mortality from Plague also, it cannot be established that the epidemic spreads

from Mysore into British India. On the other hand the experience of Davangere one of the frontier Taluks on the North West of the State lends support to the opposite conclusion. The Durbar have examined the statistics with reference to the Salem Dt. in particular and it will be observed from the accompanying statement that the prevalence of plague in that district bears no definite relation to the extent of infection in the bordering districts of Bangalore & Kolar, especially in the months of July, August & September when, according to the report of the Sub collector ~~of Hosur~~, the plague season begins in the Hosur Tk.

5 As regards the social and commercial intercourse between the people of the villages situated on either side of the frontier, to which the spread of infection is attributed, I am to state that it is a source of danger affecting both sides

I have &c

June 1913

Secretary to Govt

Statement showing the number of deaths from plague in the Districts of Salem, Bangalore and Kolar, during the years 1910-1913.

.....

Year	District	Jany.	Feby.	Mar.	Aprl.	May.	June	July	Aug.	Septr.	Octr.	Novr.	Decr.	Total. No. of death from plague
1910	Bangalore	60	67	34	5	1	..	26	90	204	313	439	367	1,606
	Kolar	..	4	..	..	..	..	..	1	41	70	204	223	543
	Salem	6	4	..	8	..	1	1	88	220	245	709	896	2,178
1911	Bangalore	238	137	88	25	37	83	404	494	415	485	519	465	3,390
	Kolar	251	125	107	39	11	30	255	346	414	349	267	241	2,435
	Salem	793	373	219	74	48	122	139	154	138	119	114	106	2,399
1912	Bangalore	468	193	88	26	14	5	28	85	89	142	126	106	1,370
	Kolar	399	245	109	21	4	3	6	43	105	143	132	113	1,323
	Salem	126	113	47	15	4	8	20	28	38	26	23	48	496
1913.	Bangalore	95	102	59	19	..	4	27	48	29	74	55	55	567
	Kolar	127	40	30	2	3	1	..	19	31	32	41	79	405
	Salem.	21	19	9	..	..	1	2	..	1	5	9	22	89

Total No. of deaths from all causes.	Population of the District.		Ratio of deaths per 1,000 of population
16,250	7,89,664	According to the Census of 1901.	16.45
14,451	7,23,600		19.96
50,022	1,890,138		26.50
18,395	7,89,664		20.25
14,774	7,23,600		17,78
40,524	1,766,096	Do. of 1911.	22.9
12.948	8,48,173		11,32
15,264	7,80,153		16.58
38,679	1,766,096		21.9
12,538	8,48,173		12.38
13,155	7,80,153		14.53
36,644	1,766,096		20.7